



# Accelerating SQL Server database modernization with Babelfish

Bill Ramos

Senior Product Manager

Amazon Aurora PostgreSQL - Babelfish

# Motivations for migrating

BREAK FREE FROM LEGACY DATABASES



Costly



Proprietary



Lock-in



Punitive licensing



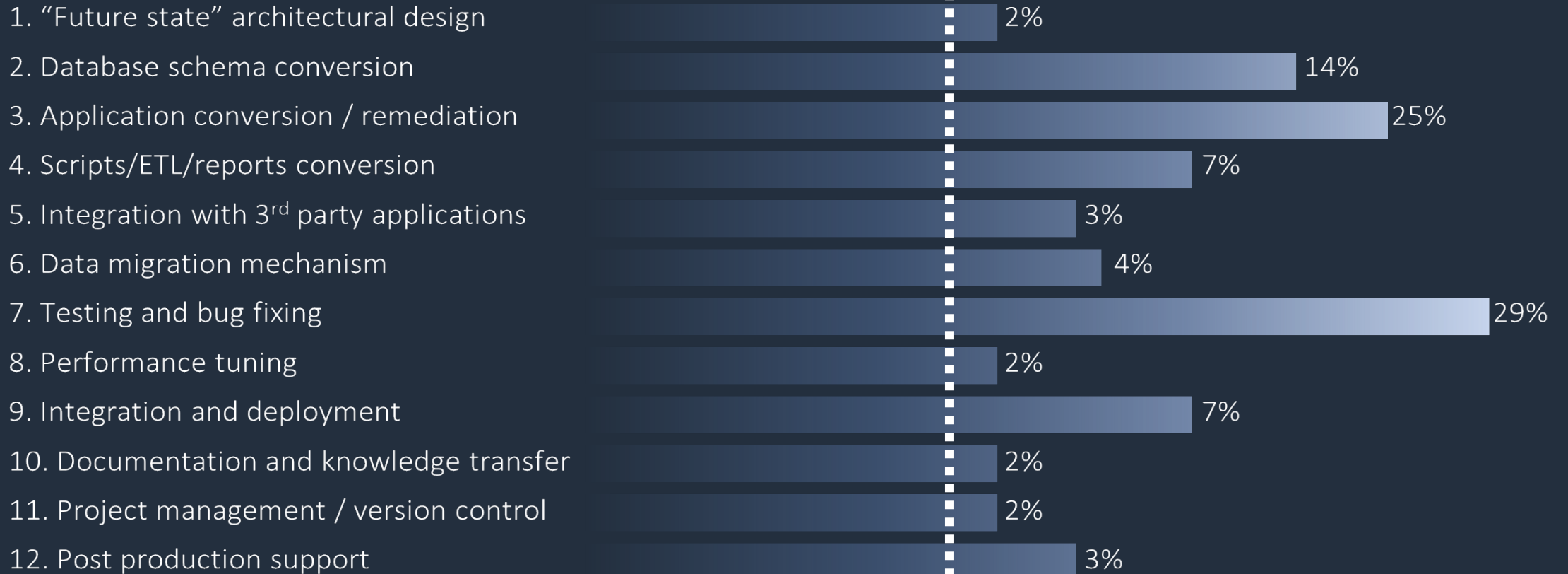
You've got mail

# Overview of a typical migration effort



## Steps in migration

## Effort breakdown



# Babelfish for Aurora PostgreSQL value to customers

Migrate SQL Server applications to PostgreSQL in a fraction of the time, vs traditional migration

## Keep existing queries



PostgreSQL language extension enabling Aurora PostgreSQL to understand Microsoft SQL Server's proprietary T-SQL

## Accelerate migrations



Lower risk and complete migrations faster, saving you months to years of work

## Freedom to innovate



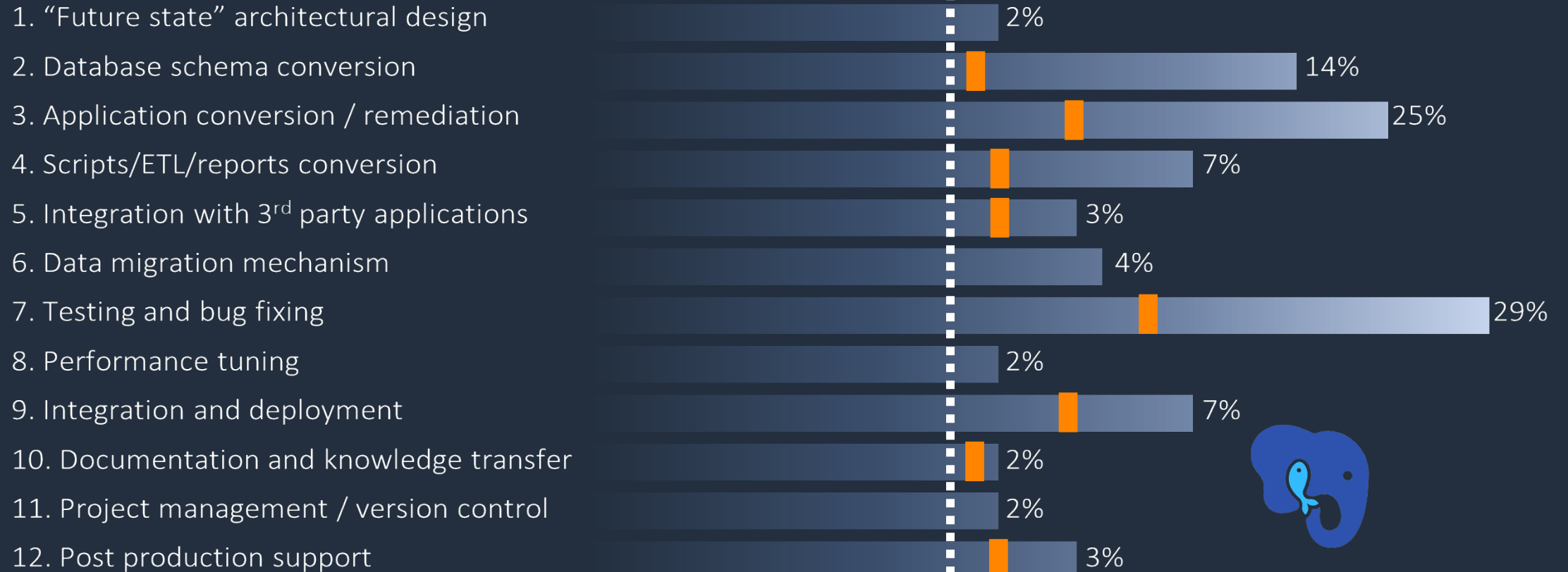
Run T-SQL code side-by-side with new open source functionality and continue developing with familiar tools

# Reducing the migration costs with Babelfish



## Steps in migration

## Effort breakdown



# Migration Assessment Tool with Babelfish Compass

ONLY USE BABELFISH COMPASS FOR MIGRATION ASSESSMENTS

- Determines what part of your app/DDL is not supported by Babelfish using open-source tool - Babelfish Compass
  - Stand-alone, command-line tool
  - [GitHub Download](#) | [User guide](#)
  - Updated regularly
  - Always use the latest version

# Compass Assessment Tool

EASY REPORTING OF WHAT BABELFISH SUPPORTS

- Creates a simple HTML report with a single command line.
- Consider SQL Profiler traces or app SQL tracing
- Includes rewrite option to workaround many unsupported commands
- No Babelfish cluster is needed to run the assessment

Example command line:

```
./BabelfishCompass.sh MyReport MyApp.sql -rewrite -reportoption xref
```

```
Report for: CompassReport : Generated at 2022-Dec-27 16:39:21
```

```
Babelfish Compass version 2022-12, December 2022  
Compatibility assessment tool for Babelfish for PostgreSQL  
Copyright Amazon.com, Inc. or its affiliates. All Rights Reserved.
```

Notice:

This report contains an assessment based on the resources you scanned with the Babelfish Compass tool. The information contained in this report, including whether or not a feature is 'supported' or 'not supported', is made available 'as is', and may be incomplete, incorrect, and subject to interpretation. You should not base decisions on the information in this report without independently validating it against the actual SQL/DDL code on which this report is based.

 [Babelfish Compass User Guide](#)

--- Report Setup ---

```
BabelfishFeatures.cfg file : v.2.3.0, Dec-2022  
Target Babelfish version  : v.2.3.0  
Command line arguments    : CompassReport  
Command line input files  : d:\CompassMyApp\MyApp.sql  
User .cfg file (overrides) : C:\Users\Administrator\Documents\BabelfishCompass\BabelfishCompassUser.cfg  
Report name               : CompassReport  
This report               : C:\Users\Administrator\Documents\BabelfishCompass\CompassReport\report-Com  
Session log               : log\session-log-CompassReport-bbf.2.3.0-2022-Dec-27-16.39.15.html
```

--- Executive Summary for Babelfish v.2.3.0 ---

```
Total #lines of SQL/DDL: 15253  
#Procedures/functions/triggers/views: 104    #Tables: 317
```

```
SQL features not supported by Babelfish      : 16  
Estimated complexity of not-supported features: medium:12 high:4
```



# Demo Babelfish in action



## Learn more

- Amazon Web Services Database Blog  
<https://aws.amazon.com/blogs/database/category/database/amazon-aurora/babelfish-for-aurora-postgresql/>
- Open-source site  
<https://babelfishpg.org/> and <https://github.com/babelfish-for-postgresql>
- Amazon Web Services YouTube channel  
<https://www.youtube.com/playlist?list=PLhr1KZpdzukf3A1hxxlwMdDD-0WTWJR-v>



# Thank you!

Bill Ramos

<https://www.linkedin.com/in/billramo/>